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ABSTRACT

The first paper in this issue, "Towards a Re-examination of Learning and Teaching at Charles Sturt University" (Perry Share, Mark Farrell, Erica Smith, Jenni Brackenreg, Lesley Ballantyne, Lisa Fawkes, Michelle Dean, Mark McFadden, and Judith Parker) is a major discussion paper by a Working Party of Academic Senate at Charles Sturt University (CSU) (Australia) and it explores fundamental learning and teaching issues in a period of continuing dramatic change in higher education. Promoting lifelong learning, the role of assessment in learning, resource based support for learning and teaching and academic staff development are some of the issues examined. The second paper, "The Nature of Scholarship in Charles Sturt University: Observations and Proposals Arising from the Work of the Carnegie Foundation for the Advancement of Teaching" (by David Meacham) develops ideas on scholarship within universities presented by the Carnegie Foundation to CSU staff. The third paper, "On-Campus Residential Schools and Alternatives: Staff Interviews" (by Sue Moffatt) examines responses from a cross-section of 10 academic staff, and identifies anomalies between University policy and practices, especially in relation to compulsory and optional residential schools. In the final paper, "Library Use as a Generic Skill" (by Dirk Spennemann, Lesley Montfort, and Greg Fry) the authors who are located at the Murray campus of CSU describe how the teaching of important generic library skills is embedded in a series of different subjects taught by the School of Environmental and Information Sciences. How teaching staff and the Division of Library Services at CSU cooperate to teach information skills is also examined. (HEF)

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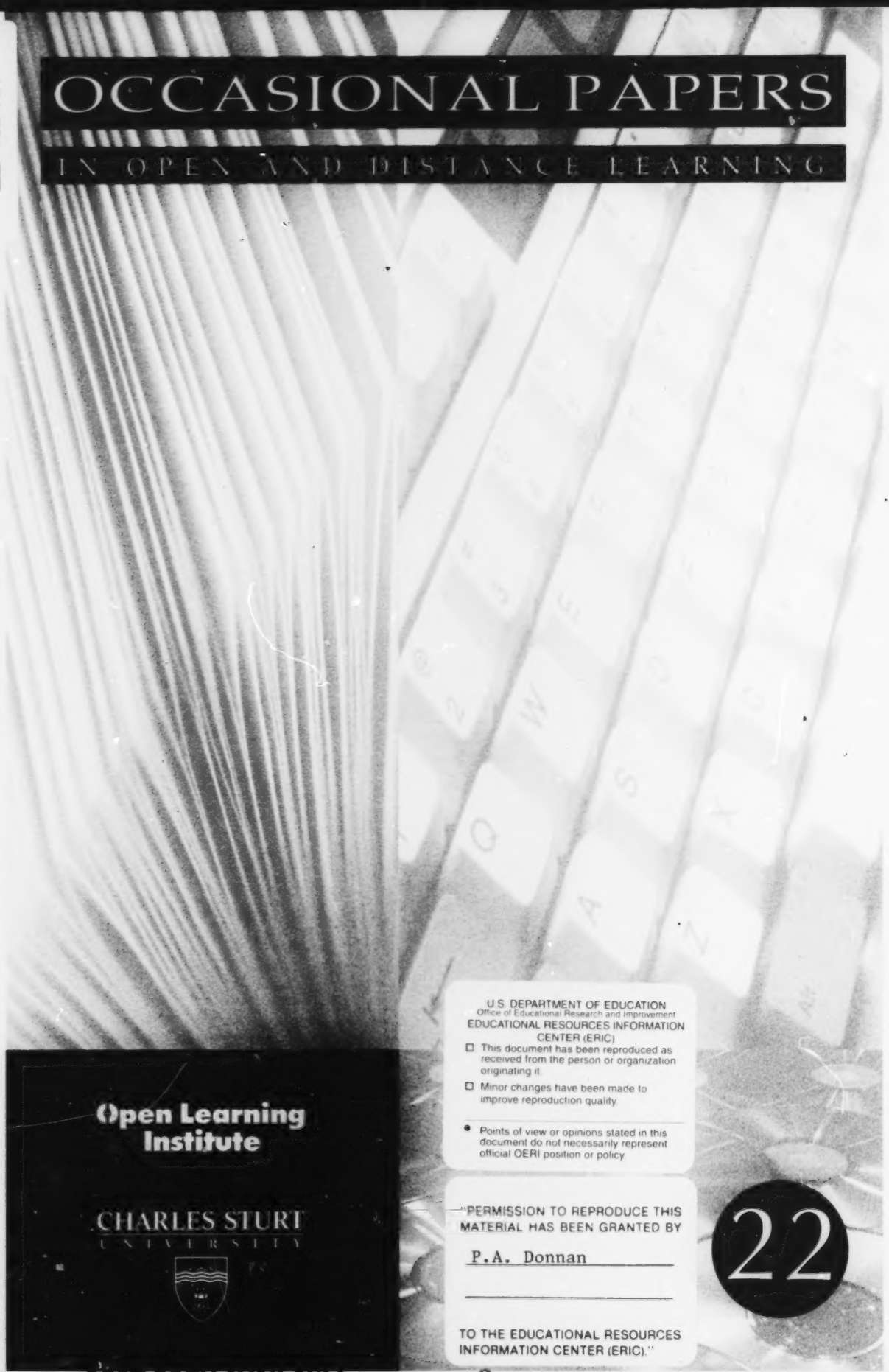

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Editorial

The first paper in this issue of *Occasional Papers in Open and Distance Learning* is a major discussion paper by a Working Party of Academic Senate at Charles Sturt University and it explores fundamental learning and teaching issues in a period of continuing dramatic change in higher education. Promoting lifelong learning, the role of assessment in learning, resource based support for learning and teaching, and academic staff development are some of the issues explored in this re-examination of learning and teaching within the University. In winning the University of the Year Award, CSU has demonstrated that it has been innovative and successful; it is still necessary, however, to build on these foundations and this paper outlines an educational vision and strategy that will be sustainable in the years ahead.

The second paper by David Meacham develops ideas on scholarship within universities presented by Charles Glassick of the Carnegie Foundation to CSU staff earlier this year; the application of Glassick's understanding of scholarship to learning and teaching within CSU, as well as to an integrated staff development program, is presented for consideration and discussion.

Sue Moffatt's paper on residential schools and alternatives examines responses from a cross-section of ten academic staff. Her analysis of the qualitative data identifies anomalies between University policy and practices, especially in relation to compulsory and optional residential schools.

In the final paper the three authors who are located at the Murray campus describe how the teaching of important generic library skills is embedded in a series of different subjects taught by the School of Environmental and Information Sciences. With the transition to on-line delivery of subjects occurring within CSU and the increasing sophistication of WEB based resources, library information search skills and the ability of students to be able to critically assess a whole range of electronic references is becoming increasingly important. How teaching staff and the Division of Library Services cooperate to teach these generic skills is touched upon in the paper.

This is the last issue of *Occasional Papers in Open and Distance Learning* which will be published in both print and electronic form; future issues will published only in electronic form, accessible at the following address under OLI publications:

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Institutions outside the University with an interest in open and distance learning that have subscribed to the publication over the years will still be able to access the publication at the above address and staff within CSU will be informed of new editions on *What's New and News*.

Peter Donnan
Editor

Towards a re-examination of learning and teaching at Charles Sturt University

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Ms Erica Smith, Faculty of Education;
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Dr Lesley Ballantyne, Faculty of Science & Agriculture;
Ms Lisa Fawkes, Student Representative;
Ms Michelle Dean, Distance Education Student Representative; Dr Mark McFadden, Executive Officer;
Associate Professor Judith Parker, Senior Academic Staff Member (Chair)**

Preamble

In October 1996, the Education Committee, a sub-committee of Senate, established a working party to develop a discussion paper on priorities and strategies for enhancing the University's capacity and success in developing lifelong learners.

In addition, the working party was asked to develop a definition of resource based learning as it applies to CSU and examine its implications for the University achieving its objective of developing lifelong learners.

Instead, the Education Committee decided on a broader process of re-examining learning and teaching at Charles Sturt University. This paper is thus a discussion of, and asks questions about, learning and teaching at the University in the context of the financial and industrial changes in higher education and broader social and political changes.

Overview

The paper sets learning and teaching at CSU within a socio-political context. CSU is well-placed to thrive in the changing university environment. We have already successfully confronted many of the challenges now being faced by more traditional universities. However, there is a need to be reflective about our practices and policies, to build upon what we already do well and to introduce, where desirable, new ways of doing things.

To be useful, debates and actions about lifelong learning must relate to the particular kinds of students at CSU and their needs as learners. The Working Party draws attention to the changing nature of the student body but also emphasises the depth of experience within CSU to enable the specific needs of its students to be met. The challenge is to continue to build upon this experience.

Education is not just about transferring 'chunks of knowledge' but about establishing meaningful relationships between teachers and learners. The paper argues that a focus on the *social relations* between teachers and learners is central to the enhancement of learning and teaching. The challenges of supporting, valuing and affirming learning and teaching, including the use of resource-based approaches, are set within this relational context.

Lifelong learning is a goal to which universities have always aspired. This goal has now been made more explicit, partly in response to societal changes. The paper examines the meaning of lifelong learning and its implications for teaching and learning. It also considers issues of crucial importance, for example, assessment, one of the key means of communication between learners and teachers. Further, the paper explores the place of resource based learning (RBL) in an effective learning culture.

The changing context

The student population at CSU is diverse and changing (see Table 1). Distance education is clearly the preferred mode of study for an increasing majority of its student population which has grown and become more culturally diverse.

Table 1: CSU's Changing Student Population [1]

Year	Total students	% DE	% UG	% born overseas
1990	13686	59	88	21
1996	22773	70	81	25

Given media interest in university entry via TER, it is worth noting that 42% of students admitted in 1996 had engaged in *prior tertiary study* and a further 17% were admitted on the basis of professional qualifications or employment experience. The University also admits students on the basis of TAFE study, mature-age or special entry status. As teachers we deal with a broad range of students in our subjects and courses, including those who bring with them a wealth of educational and life experience. There are also those students straight from school or for whom university education is a 'second chance'.

An understanding of the student profile of CSU is crucial to any re-examination of learning and teaching. Our students are very different from those found in more traditional universities. The University's distinctive approaches to learning and teaching should reflect this difference.

Much of the literature about learning and teaching, particularly on lifelong learning, has emerged from more traditional institutions as they respond to a student profile that is becoming more like CSU's. Universities used to a student body made up of on-campus, full-time school leavers now realise that to increase market share they must respond to the demands of adult learners, often part-time and learning by distance. CSU and its predecessor institutions have been catering for the learning needs of such students for over two decades and it has developed considerable expertise in this area. Accordingly, the challenge is not to introduce a wholly new approach but to reflect upon, extend and enhance what we are doing already.

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1 Figures supplied by the Division of Planning and Development.

Social, political and industrial context

Federal funds to the higher education sector will be cut by 4.9% over the next three years (O'Donnell, 1996) and any growth in the sector will depend on entrepreneurial activities. There will be increased competition to attract students, to maintain funded load and to provide attractive and relevant fee-paying courses. The effect of increased and differential HECS charges is not yet fully understood. Another unknown is the outcome of the current review of higher education (The West Committee). The long overdue increase in academic salaries, which the government is determined not to fund, must also be met from within the financial capacity of the University.

To add to the political and industrial challenges, there are those derived from a rapidly changing society. These include the development of new technologies and demands for different workplace skills and knowledge. In this context, it becomes imperative to re-examine current University priorities and practices, particularly those associated with learning and teaching (Barnard, 1996; see also Reid, 1996).

Re-examining learning and teaching is a valid response to the present changes in, and constraints upon, higher education (MacFarlane, 1995). For example, University Principals in Scotland focused on the need to re-examine learning and teaching to ensure their universities were seen to be serving the needs of the economy and employers (MacFarlane, 1992). In Australia, Candy *et al.* (1994: 185) have argued that a re-examination of learning and teaching should focus on enabling 'graduates to continue learning throughout their careers' - an emphasis on outcomes for the learner, as well as on positive economic or employment outcomes. It was argued that the latter were more likely to be achieved if students were flexible and adaptable learners who continue to value learning after they graduate.

As Candy *et al.* (1994: 38) say, graduates, 'like all other members of the community . . . have pressures to learn which arise from pervasive social and technological change, from altering life circumstances, and from curiosity and interest'. As adults and citizens, people seek 'to become' and 'to belong' (Candy, 1996). Having the appropriate abilities, skills and self-confidence enables graduates to take advantage of opportunities for continuing to learn. Many, if not most, of our students are *already* 'lifelong learners': experienced and mature learners who have chosen CSU because of its flexible delivery across the disciplines together with the contemporary relevance of its programs.

The context demands a *strategic* approach to learning and teaching at CSU (McKinnon & Walker, 1995). The University has not yet critically examined learning and teaching and developed a strategic approach as it has for research. The increasing commodification of education makes it even more important for us to offer a targeted, quality product. At a time when students can download limitless information from the Internet, we argue that they will want a *high-quality educative relationship* from universities. These factors have implications for how we teach and how we use a range of resources to enhance learning. The University already has strengths in these areas: faculties have become responsive to industry and have expanded in new areas; for example, in policing, paramedical studies, environmental science and social welfare. Anecdotal evidence suggests that we provide good services to, and *care for*, our students.

A re-examination of learning and teaching builds on and extends the University's existing policies and practices.

Developing effective relationships with students

Development of effective learning and teaching depends ultimately on building *productive relationships* between teaching staff and students. To build a productive relationship requires effective communication. We must:

- find out more about students' learning needs and motivations for studying
- communicate to students the motivations and philosophies informing our teaching
- ensure that information and advice on suitable resources is effectively disseminated
- ensure students' learning is adequately supported.

The ultimate aim of these processes is to develop *shared understandings* about learning and teaching amongst staff, students and University management.

CSU has to cater for a broad range of students - from on-campus school leavers, to experienced professionals studying externally, to those studying off-shore in Malaysia or Hong Kong. Teaching that asks students to take *more responsibility for their learning,* implies consideration of the very different learning needs of certain groups of students. There is evidence to suggest that school leavers, in particular, need support and explicit training in the use of self-directed teaching materials (Smith & Keating, 1997). The same may not be true of experienced professionals. Studies of the use of competency-based learning materials, for example, point to the way that these materials make greater literacy demands on students, suggesting the need for support and explicit teaching about how to use such materials (Smith & Keating, 1997).

There are obvious challenges for students in accepting more responsibility for their learning. Students will need to accept their role as *partners* in engaging with knowledge and reflecting on outcomes. If students are to be involved in evaluating the success of their learning and critiquing teaching practice, they need also to understand clearly the purposes of their courses and subjects and to link these with their goals as learners.

The goal of lifelong learning

The initial brief of this paper centred on the development of lifelong learners. Fostering lifelong learning is held to be valuable for vocational, societal, economic and personal reasons. In a university context, lifelong learning is a phrase that encapsulates concern to develop better educated, critical thinkers who, after the completion of their studies, will continue to value learning in the workplace, through professional associations, in more formal settings (like universities) and for their own self-improvement and enrichment (Candy *et al.*, 1994). As Candy (1996: 2) argues, this concern can be traced 'to the very origins of higher education in Australia and elsewhere'. Lifelong learning embraces goals that university educators have long aspired to for their students, such as self-directedness and independence. To be an effective lifelong learner requires the ability and desire to learn. Further, it requires an understanding of *metacognition,* that is, an understanding of *how* we learn.

The learning opportunities teachers provide can either *enable* or *constrain* students' achievement of certain generic skills and attitudes. Accordingly, the lifelong learner has been described by Candy *et al.* (1994: 43-44) as one with:

- an inquiring mind
- a sense of the interconnectedness of fields of knowledge
- information literacy
- a sense of personal agency and
- a repertoire of learning skills.

At times educational practice has not accorded with our stated intentions to develop lifelong learners. There is a good deal of evidence to suggest that some educational and institutional practices reproduce and reinforce poor attitudes to learning (Gordon *et al.*, 1995). Some of these practices are detailed by Candy *et al.* (1994: 84-88) as 'lamentable educational lapses'. Rather than restating these 'lapses', the Working Party has reformulated them in a positive way to suggest how the goal of lifelong learning might be fulfilled:

- centralise lifelong learning in the University mission statement
- act on this central element of the University's mission
- see university as a valuable personal, social as well as vocational experience
- consider the content of the curriculum and describe core knowledge and skills
- consider the appropriate pacing and sequencing of student learning at different levels
- explore a range of teaching approaches
- connect learning with the world of practice
- assess to encourage 'deep' rather than 'surface' learning[2]
- give students timely, useful, intelligible feedback
- see the library as an information resource rather than just a repository of books and journals

In its restatement (11 Dec 1996) of the University's mission and educational philosophy with respect to teaching and learning, Academic Senate explicitly recognised that effective learning depends on the *active* involvement of students in their own learning. It also recognised that lifelong skills and attitudes will develop in flexible and supportive settings clearly related to the world of practice.

The challenge for academic staff who plan and deliver subjects and courses is to ensure that educational practice reflects the commitment to lifelong learning evident in the University's mission. Further, the fundamental test of quality learning and teaching outcomes is at the operational level of *course and subject* (McKinnon & Walker, 1995). There is also a challenge for the University and that is to continue to build the institutional framework to support the best methods of subject and course development. The University must recognise the need for flexibility in structuring courses and subjects and should not be constrained by traditional approaches.

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[2] 'Deep' approaches to learning are best characterised by an intention to understand material for oneself and a desire to relate new ideas to existing knowledge. 'Surface' approaches are best characterised by an intention simply to reproduce content and focus only on assessment requirements (Ramsden, 1992; MacFarlane, 1992; see also Biggs & Moore, 1993).

Re-examining learning and teaching

Fundamental to any re-examination of learning and teaching must be the recognition that teaching is 'community property'; something that can be reflected on, shared and improved collegially (Shulman, 1993). But making teaching 'community property' will be threatening for some. As Stenhouse (1975) reminds us, teachers, as innovators, have often been asked 'to take on, initially at least, the burdens of incompetence' as they grapple with changing circumstances. The Working Party agrees with Shulman that teaching should be given *greater recognition and reward* and that this can best be achieved by making teaching 'visible', as a communal and collegial artefact, just as we do with research. By making teaching 'community property' it, too, can be 'shared, discussed, critiqued, exchanged, built upon' (Shulman, 1993: 7).

In addition to a desire to discuss and share teaching experiences, Barr and Tagg (1995) suggest a learning and teaching 'paradigm shift' is occurring in universities. This shift is from an 'instructional' paradigm where *transmission* of knowledge is the primary aim, to a 'learning' paradigm where the purpose is to facilitate the *construction* of knowledge (see also Pennay, 1996). This paradigm shift reflects changes in how we view knowledge and in our understanding about how people learn. These changes in the way we think about knowledge and learning are said to be 'a world-wide phenomenon' brought about by the need to respond effectively to the demands of the information age, including the transformation of communications through information technology, the changing nature of work and changing student populations (Hall, 1996: 30). Education is a process of making sense of, understanding and communicating ideas about our world. Changing understandings and knowledge lead to changes in education. However, change is often associated with conflict, tension and unease as shifts inevitably occur in traditional practices.

Associated with the paradigm shift from 'instruction' to 'learning' is a shift in control over, and responsibility for, learning from teacher to student. Learning is now seen as a social act in a social setting, shared and interpreted by different communities of learners (Wasser & Bresler, 1996). Knowledge is that which is shared or known communally. It is produced, negotiated, *transformed* and realised in the interaction between teachers, learners and previous knowledge (Kenway & Modra 1992). Laurillard (1993) proposes a model of learning that requires both reflection and interaction by students and the provision of feedback from teachers. Using this model, teachers are able to frame and reframe content to take into account both subject matter and student response. Teaching involves 'building bridges between the student's own language' and experiences and the specialist language and practices of subject disciplines (University of Queensland, 1996: 74).

According to this approach, Jackson and Page (1990, cited in Higher Education Council, 1992: 36) suggest:

> students are taught less but they learn more. Students are taught less in that the teacher spends less time teaching (telling students things) but the students spend more time learning (developing and testing their own abilities). Instead of telling the students things to be remembered on examination day, the teacher structures activities for the students in which their competencies can be nurtured

Developing a learning culture

Crucial to creating an environment encouraging learning is the establishment of a learning organisation; one that is willing to reflect on its purposes and outcomes and constantly seeks improvement (Senge, 1990). Before a learning culture can be a reality we must be clear about our own rationales for teaching.

We already know that clearly articulated aims and objectives are a necessary condition for effective teaching (Higher Education Council, 1992). If the central goal of our teaching is to help students 'learn how to learn' (metacognition) then we as teachers need to understand how students' *already established knowledge* connects with the knowledge to which we believe they should have access. Unless previous knowledge connects with new knowledge, that which we deem important will remain external to students, regardless of the number of statements in University documents about appropriate content and learning strategies.

Research suggests (Biggs & Moore, 1993) that helping students to exercise some control over the direction of their own learning - to take more responsibility for it - can lead to greater engagement in the process of learning. But there is evidence that many Australian students are *disengaged* from the learning process. A CAUT funded project found, 'barely half the students surveyed found their subjects interesting . . . [and] only 41% of students thought there was a positive attitude towards learning amongst their fellow students' (McInnis & James, 1995: x). Around 30% of students considered deferring in their first semester because of negative feelings about university, including their perception of the quality of education on offer.

What academics teach (curriculum), how they teach it (pedagogy) and how student learning is assessed, conveys powerful messages to students about what their teachers consider important knowledge and valued skills. These messages shape students' attitudes towards learning as a process and their own capacity to learn (Bernstein, 1996). Teaching methods dependent on memorisation and regurgitation are unlikely to develop *deep understanding* as they draw students' attention only to the surface features of a subject. They provide little scope for comprehending the underlying structure of knowledge in any discipline (Biggs & Moore, 1993; Bernstein, 1996). Indeed, certain kinds of teaching can *reinforce and reproduce* inefficient and unsatisfying approaches to learning (Gordon *et al.*, 1995).

Towards a learning focused teaching model

MacFarlane (1995) suggests that learners go through phases in developing understandings and skills. First, they have to prepare for the learning task; second, they have to access the necessary information; third, they relate this knowledge to what they already know and finally, they transform and interpret knowledge through establishing new frameworks. Related to these learning phases, are overlapping and parallel *teaching* functions:

- orientating - setting the scene
- motivating - gaining interest
- presenting - input of new knowledge
- clarifying - explaining with examples
- elaborating - introducing new material
- consolidating - trying out personal understandings

- confirming - ensuring adequacy.

Green and Reid (1989: 200) have developed a similar model to help explain how students move from information to understanding and the teaching phases that will encourage this movement. They argue that learners move through five 'activity types' in this learning process: from initial *engagement* through *exploration* and *transformation* of ideas to *presentation* of new knowledge and *reflection* on the process of coming to know.

For the teacher, *engagement*, in Green's and Reid's terms, is more than motivating students. It is engaging with the purposes of teaching a specific topic or text and its link with the wider curriculum. It is about giving students a sense of direction. The *exploration* phase then allows both the teacher and the students time to explore new concepts and ideas either through talk or in writing. The teacher becomes an observer of what experiences and information students bring to their understanding of new information. In the *transformation* phase, the teacher explicitly requires students to apply their developing understandings, to reshape and reorganise the information for a particular purpose and audience. Students then *present* or make public what they have done and what they have learned. Finally, students and teacher *reflect* on both the process and product of learning before engaging with the next text or topic.

These teaching and learning models have in common:

- the input of ideas and then their re-formation and exemplification
- generalised statements that connect reformulated ideas with appropriate subject discourses (Meyenn & Parker, 1994)
- engagement of the learner and the transformation of knowledge within a learning dialogue (King & Honeybone, 1996)
- a requirement to make knowledge explicit, to present outcomes and then to reflect on these learning outcomes (Green & Reid, 1989).

The crucial role of assessment in learning

Teachers influence the nature and content of students' learning most directly through the kinds of *assessment* tasks they set (Bernstein, 1996). Teachers who set challenging, interesting and relevant assessment tasks provide opportunities for students to engage with knowledge rather than focus on its surface features (Rowntree, 1987). As the Higher Education Council (1992: 37) reminds us, 'appropriately sophisticated assessment practices are likely to be the best possible complement to learning objectives while still being an effective device for grading'. For Lister (1996) 'assessment is . . . a powerful educational tool - used wisely it can encourage behaviour which leads to a thorough understanding of the subject. Used unwisely, it can encourage superficial learning, reliance on short term memory, and neglect of higher order cognitive skills' (p. 26).

Assessment is a process of collecting information about student learning. It is also important to recognise it as a *communication process*. It is crucial that teachers and learners share ideas, interpretations and information about subjects and courses.

Assessment information is interpreted and judged by teachers in relation to the aims and objectives of subjects and courses. It is agreed that no single indicator provides the information necessary to make an informed judgement about the skills, knowledge and attitudes students develop as they learn (Rowntree, 1987). Assessment is both a

formative and a summative process, that is, both process and product are important in student learning (Nightingale *et al.*, 1996). Assessment criteria need to be clearly and unambiguously communicated to students (Ramsden *et al.*, 1995). Issues of power, control, ownership, responsibility and choice are all integral here.

This is not to suggest that traditional forms of assessment like exams, essays and individual assignments are outmoded; rather it is to encourage reflection on the *purposes* of assessment and the variety of assessment strategies available to teachers. These may additionally include:

- reflective personal statements
- reflective learning logs related to both academic and practical contexts
- criterion-referenced peer presentations
- interest-based seminars
- peer assessment
- project work and student colloquia
- reports on research and practical work
- self assessment.

Choice of strategy and method should be made on the basis of what the subject or course is trying to do for students. To reiterate, the purposes of assessment need to be tied clearly and explicitly to the objectives of subjects and courses and these purposes made transparent to students.

Resource based support for learning and teaching

Just as teaching needs to be made 'community property' so too do approaches to teaching. At present there is much debate about the relative merits of resource based learning (RBL). There is also debate about its meaning, its efficiency and effectiveness and, indeed, its claims to innovation. RBL is defined in various ways but commonly is assumed to produce independent learners through access to knowledge under the 'guiding' hand of the teacher, usually not in 'real time' (Farrell, 1996).

Appropriate use of resource-based support for learning and teaching will enable CSU to offer the kind of education that will attract and retain students and maintain educational links with them into their workplaces. The key issue to address here is whether use of RBL heightens rather than diminishes 'the sense of human touch or contact' for the learner and the teacher (Lombardo, cited in Hall, 1996: 32). As Halliday (1994: 11) argues, the way to understanding is through the 'interpersonal gateway', that is, teacher together with students. The greater the 'conceptual distance' to be traversed by the learner, the 'more critical' it is to situate the learning in an interpersonal environment - 'some context with which the learner is likely to be positively and interactively engaged'.

Discussion of RBL is thus best anchored in consideration of how, and if, it facilitates 'interactive, independent and collaborative learning' (Andrews, 1996: 2). The 'resource' in RBL is then seen as referring to both *material* (eg print, videos, CD ROM) and *human* (eg relationships, skills, knowledge) factors. RBL can then be seen as an 'integrated set' of teaching strategies to 'promote student-centred learning' involving the use of a range of materials (Andrews, 1996). These materials may include interactive media and communications technologies. However, the teacher must remain integral. The teacher's role in RBL is then that of guide or facilitator of learning. This role is

consistent with the shift from an 'instructional' to a 'learning' paradigm (Barr & Tagg, 1995).

An element of caution needs to be inserted in the RBL debate. There are doubts about the efficacy of multi-media technologies, often considered synonymous with RBL (Lowe, 1992; Alexander, 1996). These stem not only from the features of the new technology itself but, as Alexander (1996) suggests, because the most important questions, 'what do I want my students to learn?' and 'how do my students learn?', become secondary concerns. These questions need to be foregrounded in debates about flexible delivery. Repackaging or dressing up learning resources via new technologies is unsatisfactory both for the teacher and the student. RBL should provide students with 'new opportunities . . . to learn - to visualise, to understand, to see complex relationships in ways that have not been possible before' (Alexander, 1996: 4).

Academic staff development

There are challenges associated with re-examining learning and teaching, not the least of which is to provide appropriate staff development to address changing workplace needs and requirements. The challenges for the University to shift from an instructional to a learning paradigm are multi-faceted and interrelated (Barr & Tagg, 1995). They exist for the institution as a whole, its managers and administrative staff, teachers and students. These challenges are to:

- create and communicate a shared understanding of required changes
- address subject and course development, innovation and evaluation
- share learning and teaching successes and achievements
- reward and recognise achievements in learning and teaching
- reaffirm the link between the scholarship of teaching and other forms of scholarship
- address academic staff development needs.

At the risk of giving such a complex set of challenges an apparent simplicity, the Working Party believes that the process of re-examining learning and teaching at CSU should be directed towards:

- valuing and affirming learning and teaching across the institution
- providing academic staff with well considered and appropriately targeted support for learning and teaching
- providing opportunities for staff to share good teaching practice and talk about their teaching
- adequately supporting innovation and change.

Conclusion

A re-examination of learning and teaching at CSU will begin with questions of student need and educational purpose. It will then necessarily move to a consideration of curriculum content and structure and approaches to teaching, including assessment and evaluation. Finally, it must address issues of support both for teachers and learners.

Developing students who are self-directed and independent learners is both a complex and demanding task. In addressing this task, there are significant questions to be debated across the University, not the least of which is that of RBL. There are questions around issues of access and equity and the need to trial and evaluate new learning resources and teaching methods. It is crucial that these debates be vigorous and open. They must involve students, administrators and managers as well as academics who have the final responsibility for delivering the shared learning agenda emerging from such debates.

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The nature of scholarship in Charles Sturt University: Observations and proposals arising from the work of the Carnegie Foundation for the advancement of teaching

A discussion paper commissioned by Dr I F Barnard and prepared by Associate Professor David Meacham

Abstract

This paper summarises some of the work of The Carnegie Foundation and considers its application to scholarship in CSU particularly in the area of Teaching and Learning.

Charles E. Glassick of The Carnegie Foundation for the Advancement of Teaching delivered to CSU a paper entitled **Scholarship Assessed: Evaluation of the Professoriate**, based on an Ernest L. Boyer Project of The Carnegie Foundation for the Advancement of Teaching, developed by Charles E. Glassick, Mary Taylor Huber, and Gene I. Maeroff, who made the following observations (edited and italicised) after studying the nature of scholarship and its assessment in a large number of Universities.

Summary of the Carnegie view of scholarship

Universities traditionally have rewarded most highly the research accomplishments of their staff, and remain committed to research and discovery. However, in recent years they have also been reaffirming their historic mission of teaching and seeking new ways to support public engagement through integrative and applied scholarship, as well as research.

*The goal of **Scholarship Reconsidered** was to move beyond the debate about 'teaching versus research' as faculty priorities and give to scholarship a broader, more efficacious meaning. We propose a new paradigm of scholarship, one with four separate yet interlocking parts: the **discovery** of knowledge, the **integration** of knowledge, the **application** of knowledge, and the scholarship of **teaching**. The first two kinds of scholarship - the discovery and integration of knowledge - reflect the investigative and synthesising traditions of academic life. The third element, the application of knowledge, moves toward engagement as the scholar asks, 'How can knowledge be responsibly applied to consequential problems?' Finally, the scholarship of teaching recognises that the work of the scholar becomes consequential only as it is shared with others.*

***Scholarship Reconsidered** argues that the academy needs to encourage and reward all four categories of scholarship. The scholarship of discovery - the category that comes closest to what is meant when academics speak of 'research' - should be reaffirmed. We must also recognise, however, that without integration, knowledge becomes pedantry: without application, knowledge becomes irrelevant; and without sharing through teaching, the continuity of scholarship is lost. If higher education is to be enriched by exchange among these different forms of scholarship, a more inclusive view of what it means to be a scholar is necessary.*

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The proposition is that it will be possible to take account of different kinds of scholarly activity and accord each the recognition it deserves only with agreed-upon standards of scholarly performance for all types of scholarly work.

This is not a new task - academics have been evaluating scholarship for years. Journals, scholarly presses, granting agencies, promotion and tenure committees. So we asked, in effect, can we find standards applicable to all forms of scholarship by examining what standards are already in use?

A survey of standards indicated that the key to these commonalities in standards lies in the process of scholarship itself. We found it possible to identify in the lists and guidelines examined, a set of six shared standards

All works of scholarship, be they discovery, integration, application, or teaching, seem to involve a common sequence of unfolding stages. Thus, we have found that when people praise a work of scholarship they usually mean that the project in question shows that it has been guided by these qualitative standards:

- *Clear goals*
- *Adequate preparation*
- *Appropriate methods*
- *Significant results*
- *Effective communication*
- *Reflective critique*

Clear goals

First, scholarly work, to be successful, must show clarity of goals. A well-defined purpose is critical not only in research, but also in the integration and application of knowledge, and in teaching.

Adequate preparation

Scholarly work also requires the professor to be professionally well prepared. Whether engaging in discovery, integration, application, or teaching, the scholar must bring the wealth of knowledge, depth of experience, and combination of resources the project needs.

In the documents we examined, adequate preparation is identified repeatedly as one of the most basic and important for scholarly work of all kinds. In research, success depends on the scholar's being well versed in the literature.

Teaching, too, can and should be judged on the basis of preparation in terms of materials and knowledge.

Without question, those engaged in the scholarship of application, clearly must be judged in part on the way they draw upon resources, not only from their own disciplines but also from practitioners in the field.

In summary, all sources we examined agreed that adequate preparation is a standard of excellence for all scholars, regardless of their work.

Appropriate methods

As a third standard, scholars must use appropriate methods, a yardstick that can and should be used in all aspects of academic work.

In teaching, of course, methods and procedures make all the difference - from the logic of the syllabus to pedagogical procedures to evaluation.

To put it simply, in evaluating scholarship we must ask: 'Were the methods and procedures appropriate to the project?'

Significant results

Any act of scholarship ultimately must be judged by the significance of its results. In the case of research, this standard has long been viewed as a core dimension of the scientific method.

In addition, service activity like teaching, must in the end be judged not by process but by results.

Effective communication

Good communication means not just good teaching but scholarship in all its forms. All scholarship must become 'community property' through effective communication.

It is important that the scholarship of teaching be communicated to colleagues as well as to students. Universities should take as an indicator of excellence in teaching the sharing of innovative instructional materials and methods through formal publications, conferences, and seminars, as well as through informal means.

Service, too, requires this standard. The effectiveness of public service should be based, at least in part, on 'the quality and impact of the written documents produced.'

And of course scholarly presses and professional journals always include criteria relating to effective communication.

I suggest that scholarship in every form is a public act, and while some work is quite specialised it must, in the end, be known and understood by many others.

Reflective critique

The final standard is that scholarly work should be accompanied by reflective critique. In discovery, integration, application, or teaching, the scholar thinks about his or her work, seeks the opinions of others, and develops his or her learning over time.

Reflective critique is not as common in our sources as the other standards recognised in university guidelines for judging research and teaching

Insightful reflection begins with self-conscious practice, which continues after a project is done. This is especially important in teaching. Regarding professional service, it is surely significant that virtually all funders of applied projects ask that proposals contain an appropriate plan for evaluation.

Careful evaluation enriches scholarly projects by enabling the old ones to better inform the new. Indeed, the quality of reflective critique, though least often recognised in the evaluation of scholarship, may be the most important of all.

These six yardsticks of excellence apply to all forms of scholarship. Within these common criteria are endless variations as the standards are applied in different ways to various disciplines and various types of scholarship. Any scholarly work worthy of the name should meet these standards, which define the core of excellence for all academic work.

The work of the Carnegie Institute has placed the scholarship of teaching alongside the other scholarships of discovery, integration and application, which together include all aspects of University scholarship.

It has also established a common language and methodological basis upon which to make qualitative judgements in any of the defined fields of scholarship, and to compare relative performance in different fields.

Relevance of the Carnegie view of scholarship to CSU

If the Carnegie approach were to be accepted by the University, then it would follow that recruitment, promotion and progression should be based on scholarship, which would be judged in all its aspects by Carnegie's standards of: clear goals; adequate preparation; appropriate methods; significant results; effective communication and reflective critique.

A decision would then need to be made on the relative importance of teaching, discovery, integration and application to the University. The worth of competencies in these areas would then need to be weighted appropriately across the institution and in the case of individuals.

Using the Carnegie schemata would change the direction of the University somewhat as it does not wholly coincide with the more traditional divisions of: research; consultancy; teaching and community service. There is, however, a large degree of congruence as indicated below:

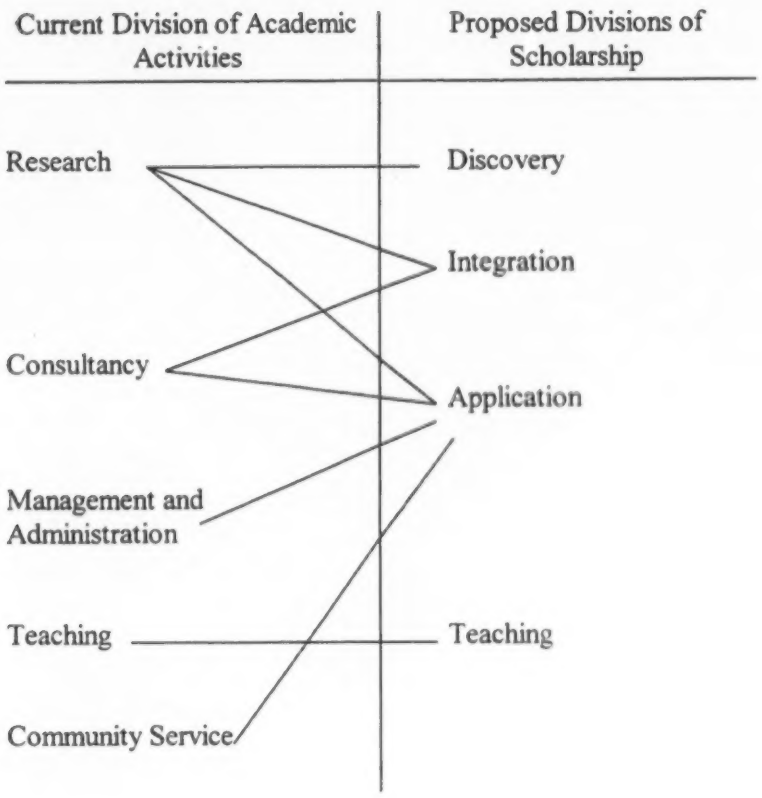

Figure 1: Relationship between traditional division of academic activities and the Carnegie schemata

It would be possible to maintain the existing dimensions of University academic work insofar as they could be deemed scholarly activities. However, this would remove CSU from attempts by the Carnegie Foundation to establish common languages and structures, and dilute the idea of scholarship as it applies to all aspects of academic work.

Using the new parameters a matrix showing dimensions of activities and standards of performance could be established.

Table 1: Performance matrix

Performance / Activity	Clear Goals	Adequate Preparation	Appropriate Methods	Significant Results	Effective Communi-cation	Reflective Critique
Discovery						
Integration						
Application						
Teaching						
Sample Criteria	well defined purpose	literature review materials and organisation	teaching methodology research methodology	advancing and apply knowledge teaching outcomes	compre-hensive articles etc. clear oral & written communi-cation conference presentations	self develop-ment acting on evaluation

Such a matrix could effectively be used to inform decisions made about promotion, progression, awards for excellence and to provide feedback for academic staff where scholarship is under consideration for any purpose.

Further uses for this approach would be in the area of staff development where staff would be assisted to meet the criteria in the matrix, and in generating outcome statements for the University and for individuals involved in performance management.

Finally the approach could be used to clarify the nature of acceptable scholarship in the University. This would be less subjective and result in better outcomes for staff able to satisfy clearly articulated requirements.

Systemic ramifications

If the above views of scholarship were accepted by the University and adopted by the Faculties, then the following systemic ramifications would need to be considered.

1 Recruitment

All advertisements for academic staff should indicate the required dimensions of scholarship including teaching, together with their relative importance to the position.

The interview process for new academic staff should give appropriate weight to each dimension of scholarship and questions be allocated accordingly. Therefore, the Scholarship of Teaching would need to assume greater significance and be examined in a systematic way using standards relating to goals, preparation, methodology, results, communication and reflection. Glassick suggests a series of key questions

applicable to any area of scholarship. So these questions could be applied to all scholarly activities in the University.

Standards

Clear Goals:

Does the scholar state the basic purpose of his or her work clearly?

Does the scholar define objectives that are realistic and achievable:

Does the scholar identify important questions in the field.?

Adequate Preparation

Does the scholar show an understanding of existing scholarship in the field?

Does the scholar bring the necessary skills to his or her work?

Does the scholar bring together the resources necessary to more the project forward?

Appropriate Methods:

Does the scholar use methods appropriate to the goals?

Does the scholar apply effectively the methods selected?

Does the scholar modify procedures in response to changing circumstances?

Significant Results:

Does the scholar achieve the goals?

Does the scholar's work add consequentially to the field?

Does the scholar's work open additional areas for further exploration?

Effective Communication:

Does the scholar use a suitable style and effective organisation to present his or her work?

Does the scholar use appropriate forums for communicating work to its intended audiences?

Does the scholar present his or her message with clarity and integrity?

Reflective Critique:

Does the scholar critically evaluate his or her own work?

Does the scholar bring an appropriate breadth of evidence to his or her critique?

Does the scholar use evaluation to improve the quality of future work?

Communication:

What evidence can the scholar provide of effective communication with students and other University members?

What feedback mechanisms has the scholar used with students?

How has/will the scholar use electronic media for communication?

Reflection:

What is the worth of the scholar's teaching?

How does the scholar know?

What steps has the scholar taken to increase its worth?

2 Staff induction

This should similarly focus on the dimensions and standards of scholarship, including new staff into what it means to be an academic in CSU and specifically what it means to be an academic teacher in an institution committed to flexible and lifelong learning. A major staff development initiative based on the scholarship of teaching should be introduced, beginning at staff induction and continuing through the probationary year, with successful participation being a condition of continuing employment. Staff in continuing employment would also be encouraged to participate.

3 Staff appraisal and staff promotion

Judgement of competence should be made with direct reference to scholarship, with processes and instruments reflecting this. Teaching competence should be judged by evidence relating to each of the standards of scholarship in teaching. The opportunity to participate in a formal course as described above would permit staff to develop their scholarship, and present strong evidence to promotional panels.

4 Academic staff development

Staff development initiatives should be located within the dimensions and standards matrix of scholarship. Examples are given below.

Table 2: Locating staff development within the performance matrix.

Standards / Dimensions	Goals	Preparation	Methods	Outcomes	Communi-cation	Reflections
Discovery	Objectives setting and project manage-met.	Electronic data base searching in specific disciplines.	Quantitative and qualitative analysis.	Achieving significant results.	Article writing and Conference Presen-tations.	Responding to criticism and referring work.
Integration	Articulating new uses for existing knowledge.	Multi-disciplinary searches.	Multi-disciplinary methodol-ogies.	Achieving significant results with diverse criteria.	Selecting appropriate journals and writing for an audience.	Referring combinations of disciplinary input.
Application	Establishing consultancy objectives within regulations and expec-tations.	Developing networks. Searching for consult-ancies and tenders and writing and costing proposals.	Project manage-met ethics protocols.	Meeting the demands of clients.	Report writing for clients	Refining techniques maintaining networks.
Teaching	Developing appropriate learning and teaching objectives.	Establishing a knowledge base and teaching program.	Facilitating teaching and learning in various modes.	Recognising and achieving tangible learning	Developing feedback for students and teaching portfolios	Evaluation and refinement of teaching.

This staff development process should be articulated with a formal award in 'Scholarship in Higher Education', which would include research, consultancy and so on, and subsume the PG Dip In Teaching and Learning in Higher Education currently offered.

Teaching and learning

In addition to elevating the status of teaching as scholarship in the University the views on scholarship presented above would have specific consequences for teaching and learning at the University. Current developments in the area include: expansion of formal evaluation; use of new technologies; development of resource based learning and the introduction of a more flexible calendar.

The developments should be undertaken in a scholarly manner as indicated in the following example.

Resource Based Learning

Standards for Scholarship	Consequential Activities
Clear Goals	Interrelated course and subject goals, clearly expressed with observable outcomes where possible. Congruence between goals, content methodology and resources.
Adequate Preparation	Demonstration of personal knowledge of contemporary concepts, structures, methods and substantive content of the discipline. Selection of resources to reflect this knowledge and link directly with stated goals. Presentation of resources in an accessible form with appropriate user friendly navigation instruments. The development of support structures for students and staff.
Appropriate Methods	Development of a rationale for RBL which relates to the specific discipline area. Congruence of teaching method with goals. Interactive learning, use of technology. Feasibility of methodology monitoring procedures. Equity and access provisions.
Significant Results	Grade distribution. Evidence of development of autonomous learning competency based assessment. Growth from prior learning. Generic skill development and employment outcomes.
Effective Communication	Comprehensive study guide covering what to study, how to study and why study. Extensive and supportive feedback on assignments, availability of support and consultation. Knowledge of University services to students. Electronic media - computer and teleconferencing, use of web for listservers and forums. Publication in Journals and Presentation at Conferences.
Reflective Critique	Use of formal and informal evaluation procedures dealing with both the process and product of learning. e.g. Expert and client opinion. Willingness to seek and reflect on criticism and act accordingly.

In conclusion

It is proposed that the University, using the Carnegie Schemata or some variation of it, defines the dimensions and standards of scholarship, and that such definitions are used to recruit, develop and evaluate academic activities in the University, and form the basis of a fully integrated staff development program.

Recommendations

1. The Education Committee form a working party to refine the ideas in this paper and their specific applicability to CSU.

2. The resulting paper be presented for widespread discussion in the University.

3. A revised paper including specific recommendations for action together with the identification of responsible staff be presented to Senate.

On-campus residential schools and alternatives: Staff interviews

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Abstract

This paper presents qualitative data about the attitudes and experiences of CSU teaching staff in relation to on-campus residential schools. The analysis of the semi-structured interview responses detects anomalies between University policy and practice, especially in connection with 'compulsory' and 'optional' residential schools; furthermore, it examines issues associated with the combination of learning resources and supporting media in teaching a subject and finally it raises questions about the negotiation of alternatives to residential schools, including what should be taught in optional schools.

Demographic context

In May and June of 1997, five academics from the Faculty of Science & Agriculture and five from the Faculty of Health Studies were interviewed in order to obtain qualitative data about their attitudes and experiences with residential schools and alternative learning resources. A semi-structured interview process was used (Appendix A). Four of the academics work at the Bathurst campus, four at Wagga and two at Albury. The disciplines taught in were information technology (IT), and nursing or health science, at both undergraduate and postgraduate level. Five academics were male and five female. All staff taught in the distance education mode, while some taught internally as well. The time of employment of staff at CSU or prior institutions ranged from three and a half, to eleven years. Seven of the academics had studied by distance education themselves and had experienced residential schools as students.

University residential school policy

Staff practice

The academics were asked about the University's Residential School policy (CSU, 1994), in order to ascertain whether staff had considered it in their decision making. It was found that the policy was known to six of the ten academics, and they would have either looked on the Web or in the Academic Manual if they had wanted a copy. Three academics assumed such a policy may exist, but had not considered it previously, with one of these academics commenting that induction processes should include more detailed information on university policies. One person did not know of the policy's existence, but he did not have any residential schools in his subjects.

While some of the academics knew of the University's policy, they did not always give the impression that it had been followed when decisions were made about the designation 'compulsory' or 'optional'. The reasons given by academics for classifying residential schools as compulsory were: a personal belief in the educational value of the school; students' claims that they can only get leave from work if the school is compulsory; some historical inertia and lack of access to any possible technological alternatives; the need to gain essential laboratory skills; and requirements of

professional bodies. Most of these reasons do not conform with the policy's stated reason for making a school compulsory i.e. 'where it is judged that certain activities such as seminar presentations, laboratory work etc. associated with that subject can only be achieved by face-to-face activities.' (CSU, 1994, p.1).

Usually staff felt that they had autonomy in decision making, though they also consulted with others in their discipline, except where an outside accreditation body required compulsory on-campus attendance for certain students. In only two cases had the Dean made the final decision about a residential school; once when a school was made optional in order to resolve cross-campus differences, and once when a school was cancelled despite the fact that the academic felt that the Dean was considering finance over pedagogy.

The interviews indicated that the situation is very much in a state of flux, with residential schools changing from compulsory to optional, or being cancelled during 1997, despite the fact that there has been no change in official policy. One academic felt that these changes were not related to any difference in the subject matter that would be delivered at the school, but were more to do with the geographical dispersion of the students. In another case a subject which previously had a compulsory school now has none, due to financial reasons (saving on laboratory costs) and student difficulties in finding time to attend. The associated subject materials had to change from requiring laboratory skills to a more theoretical foundation, but the staff member involved still felt that the students were missing out on learning opportunities. Generally, staff favoured having some form of face-to-face contact in principle, and some were vehement in their defence of residential schools. However, they also recognised the difficulties that were created for students in requiring on-campus attendance.

Two course based residential schools have been reclassified from compulsory to optional during 1997. One required technical computing skills, which more and more students could demonstrate they already had, and the other was placing too much of a burden on nursing students who could not easily get time off work, whose leave would have been unpaid, who had young children etc. The number of requested exemptions had indicated that the schools were either unnecessary or too onerous. In both cases it will be assumed in future that those who do not come, either have the required skills or can attain them some other way, though there have been some alternative initiatives organised for the health discipline students. Professional seminars are run in places like Sydney and Wagga, and students are notified that the academics will be in their area and are encouraged to talk to them.

Exemptions

The *CSU Student Information System: Student Res School Exemption Listing* showed that, in 1996, there were approximately 1700 applications for exemptions for 260 subjects, an average of about 6.5 per subject. The academics interviewed almost always stated that exemptions to compulsory schools were easy to obtain, partly because of the reasoning given in the previous section - compulsory schools did not necessarily include essential activities. The only subject with few exemptions was one based on gaining laboratory skills. In that case, the students had to answer the questions in the laboratory manual the best way they could, using the text. In all cases except one, individual academics were the decision makers when it came to exemptions, as long as the correct documentation was provided. The exception occurred when a course coordinator, rather than a subject coordinator determined all the exemptions. In no case did the Dean or Head of School make the decisions.

The attitude amongst the IT academics towards exemptions was that their distance education students were adults who were best able to determine their own needs. In the past access to hardware and software was such that many students had to come on campus in order to attain required practical skills. It was felt that this situation had changed and that students had access to as good or better resources in their homes or at work. One academic nevertheless, labelled his schools as compulsory because he felt that students gained a lot from them, and while he gave exemptions liberally, he sometimes warned students that it would be 'at their own risk'. In another case the compulsory label was simply used to enable students to get time off work if they wanted to attend, so exemptions were required for all students who chose not to come.

The exemption rulings for the health discipline subjects were generally more structured and based on previous experience and what was acceptable to accrediting bodies. In one subject, the Dean had approved that a residential school be compulsory for students doing three courses, but optional for those in two other courses. The costs and difficulties of on-campus attendance for the cohort of students doing gerontology were considered to be too great, while students in another course generally got paid study leave to attend. Individual exemptions could also be gained under certain circumstances by contacting the course coordinator personally, who then advised students to contact the subject coordinator to find out what they would miss at the residential school.

Learning resources

Another group of questions were asked in order to determine what learning resources were currently being used, who decided the combinations of resources, reasons for the choice and whether the combinations were in a state of flux.

Delivery of subject matter

All staff interviewed, except for one involved with a fully online subject, used print as the main way of delivering subject matter. All staff used some form of face-to-face contact, eight at on-campus residential schools, and two at sites closer to the bulk of students. (The academic who provided voluntary face-to-face contact in Sydney this year will expect students to fund these sessions in the future.) One academic indicated that only Masters students did not get any form of face-to-face contact, but they were supported by teleconferencing instead. Other learning resources used to a lesser extent by various staff were provided online, on disks, via teleconferencing, or video recordings. Two academics emphasised the use of resources in the students' own workplace.

Three IT academics offered on-campus subject based residential schools. Two still retained the traditional compulsory schools, one because of a strong belief in their efficacy, and one who confessed to some historical inertia. The third academic taught a service subject for health services management. It had a residential school which had recently changed from compulsory to optional, due to the geographical dispersion of students rather than for pedagogical reasons. Of the five academics teaching in health related disciplines, two had compulsory subject based schools if practical skills were required, but a foundation subject for paramedics had no residential school. Three taught in optional course based schools, while one academic had no residential school teaching at all.

Teleconferencing was being used by one IT academic with his Masters students, and by three health discipline academics. Video resources were mentioned by all

academics teaching in health related disciplines, but IT academics do not use them at all. Some are offered to students for viewing at residential schools, while one is sent out to newly enrolled students. The cost of creation and maintenance of a video was mentioned as a problem. Audio cassettes were not used by staff as a learning resource, although one was trialed as a way of providing assignment feedback, but met a mixed response by students. Again problems with the time needed to create and update audio tapes were mentioned.

Student support

Eight academics used the phone to a significant extent for student support, both academic and emotional, and all used the phone to some extent. Only one academic mentioned pressure to keep phone bills low. Support was also provided online, by fax, teleconferences, face-to-face contact and mail.

There were obvious differences between academics teaching information technology and those in health disciplines, in their usage of online facilities. All five IT academics used email extensively, three used a listserv, MOO or POWWOW, and four used the World Wide Web for tutorial support or to provide resources. The health discipline academics were all willing and able to use email for student support, but four stated that almost none of their students had access. One described her students as financially underprivileged.

Interestingly, online support was not seen as a substitute for phone support. One academic said that on a busy day he would answer more than 40 email messages, and spend an hour on the phone as well. He felt that changing his compulsory residential schools to optional would only increase the amount of email and phone traffic he had to handle. An academic who had used email since 1995, also used the phone 'intensively'. The academic who taught a fully online subject had a mobile phone that students could ring.

Reasons for the chosen combinations

Certain combinations of learning resources were chosen for reasons of: historical inertia linked with time constraints - 'that's the way it has always been done and to change it would take too much time'; equity and access, especially when it came to deciding whether to use online support; lack of time for academics to develop more than quality print materials; and finance. Academics seemed to be more aware of the costs that students would incur with using certain resources, than costs to the university to produce them, although one staff member would have liked to offer more face-to-face contact with students on site but cost considerations made it impossible.

Eight academics, felt that they had autonomy, in consultation with other members of their discipline, in the choice of learning and support resources for their subjects. One other had inherited a subject that was being phased out, and she felt that there was no point in investing the time in changes at this stage. Another felt that the Dean had taken over some of the decision making for financial reasons.

As was to be expected, all the academics mentioned pedagogical reasons for their choices, but they were also very conscious of student support needs and these seemed to take precedence over any considerations of cost or time for the academic. Four academics mentioned market forces in relation to residential schools. One IT staff member saw residential schools as a marketing plus, and felt that they distinguished CSU's course from that of its competitors. The other three had either cancelled

residential schools, or changed them from compulsory to optional because they felt it would increase the number of students nationally and internationally who wanted to do their courses. No one had verified this belief with market surveys.

The academics in the IT discipline were all considering offering more online support, and one was considering using CD technology. This was in contrast to the health discipline academics who did not think that online support would be relevant at this stage as too few students had access. There was a concern expressed that some non-print materials were out of date but that there was not the time or money to upgrade them.

An interesting anomaly was discovered between the academics' attitudes towards residential schools and online resources. While academics were very conscious of equity issues in relation to using online support, and would not consider it until the bulk of students had access, they still offered residential schools despite the fact that many students could not access them. They were content to label the schools optional under such circumstances, yet did not see that online support could be optional as well.

Compulsory residential schools

Of the eight academics involved with either subject based or course based compulsory schools, two felt that there were essential practical skills associated with their discipline, that could only be achieved satisfactorily face-to-face. Two others stated that the schools were made compulsory because of the nature of the student cohort - the students needed the emotional support that face-to-face contact could provide, and needed to be shown independent learning skills.

Alternatives

Four academics had explored alternatives to residential schools, and of these two felt that the alternatives would have been satisfactory. Online and other visual resources, teleconferencing, and student networks had been considered. The reasons that changes hadn't been made were given as historical inertia and campus differences. One campus felt that the schools should be compulsory, while another campus would have been happy offering alternatives. Discussion is ongoing. The other two staff who had explored alternatives felt that they would not provide as good an educational experience as that provided by face-to-face contact. Of the four who had not explored alternatives, two were adamant that there would be nothing to gain by removing face-to-face contact, and two thought that they may consider alternatives in the future but time constraints had prevented them, so far.

Negotiation by students of alternatives to residential schools is the exception rather than the rule. Academics involved with laboratory work felt that there was no satisfactory substitute, even if equipment was available, because of the lack of supervision off campus. In other cases, students were able to contact the academic and be given a rough idea of what would be taught at the residential school. In most compulsory subject based schools, the residential program is flexible and often driven by student needs, rather than containing only essential activities. Students who do not attend, miss out on these enhancements to their education, though the essential materials will be contained in the learning resources they have been given. Academics were happy to consult with students who could be on-campus at a time outside the residential period.

Residential school information

Students who required an exemption were not always fully informed in their decision making. All staff involved with subject based schools provided brief information in their subject outlines, but were hampered by the need to be flexible, since they mostly based their schools on student needs. Typically, information in the outline included the topics expected to be covered, an indication of problem solving sessions, and notification that examination techniques may be discussed. Students involved in course based residential schools were sent a letter, giving them a timetable, and a brief description of the program to be covered.

Some academics made a great effort to send students who had obtained exemptions through misadventure, copies of information provided at compulsory schools. This included outlines of each session, draft answers to previous exam questions, copies of handouts and worksheets, and extra problem questions. However, other staff had an 'out of sight, out of mind' mentality and provided nothing voluntarily. It was up to the individual student to contact the academic and obtain what help they could.

Student feedback

All academics interviewed who ran compulsory schools said that student feedback at the schools was almost always positive. There were a few complaints about the shortness of two day schools, timetable clashes, and the academic program not suiting a particular individual's needs.

Optional residential schools

Two academics interviewed taught optional subject based schools, and one contributed to a course based school. These schools had recently changed from being compulsory. The reasons given were: the geographical dispersion of students and the fact that the subject serviced several courses; an intercampus compromise between a wish to have no school and a wish to have a compulsory school; and, for a course based school, the fact that many of the students had studied at university already and had less need for support and learning of study skills.

As mentioned previously, academics seemed unconcerned about equity issues in relation to optional schools. Even though they had been redesignated optional, the learning opportunities and residential school information provided in the subject outline did not change from when they were seen as compulsory, but the support for students who did not attend was less than it had been for those who previously requested formal exemptions. It was a case of 'be it on your own head', unless students contacted the staff member directly. The problem appears to lie with academics' attitudes towards the word 'optional'. They assume that students are choosing not to come, rather than being unable to attend; therefore they feel no compulsion to offer alternative support to these students. This creates an inequitable situation if the designation 'optional' was initially made in recognition of the students' attendance difficulties, yet the subject material offered at the school is not purely remedial and includes information like examination hints.

No residential school

Six academics, three from each discipline, taught subjects that did not include a residential school component. In all cases they felt that this suited their students' needs and they had had no requests for a school. In two cases it was seen as a bonus and a way of attracting more students. The academics emphasised the adult nature of their students, the fact that access to equipment was available either at home or at work, and that they were mostly professionals with many relevant learning resources in their daily lives. They felt that the support needs of these students would be adequately covered online or by phone.

The IT academics provided two-way interactive opportunities by the use of online technology - email, listservs and computer conferencing - and the phone. One also provided face-to-face contact at voluntary meetings in Sydney. In all three cases, it was left to the students to acquire practical programming skills at home or work. One academic provided a disk, which in combinations with the textbook, he felt would give the students autonomy in their learning.

The academics in health related disciplines used the phone for two-way interactions, either individually or via teleconferences. One posted extensive feedback with assignments. The academic who was most in favour of not having residential schools had included many alternative opportunities including a welcoming letter, an audiotape, teleconferences, and on-site visit to students. She believed in reflective practice by learners, based on their own professional experience. These academics did not use online resources at all, apart from a very small amount of email, due to lack of access by students.

Discussion

Policy and practice

There was an obvious difference between the University's policy on residential schools and the way that it was being implemented by the sample of staff interviewed. While most staff knew of the policy's existence, few seemed to have correctly applied its definitions of compulsory and optional when designating the residential schools in their subjects. This meant that the granting of exemptions to so-called compulsory schools was almost automatic, creating an unwieldy process for the University. It also meant that an inequitable situation was created for students who could not attend optional schools, where non-remedial activities were offered. Decisions about residential schools were generally made at academic level and did not directly involve Heads of School or Deans. This autonomy has allowed for ad hoc decision making that has meant a multitude of anomalous individual policies being created by staff.

Either the current residential school policy should be enforced more strictly by Schools and Faculties, who are named as the responsible bodies, or a more workable policy should be created that fits better with academic staff beliefs. This policy needs to consider a way of reducing the number of exemption applications and offering support to students who cannot attend on-campus. If a new policy is created it should be promulgated widely via mechanisms like *What's New and News* and *Billboard*, so that staff are more informed in their decision making.

Learning resources

The ten academics interviewed all showed dedication and commitment to the pedagogical and support needs of their students in determining which learning resources they would use for their subjects. All staff involved with undergraduate courses offered some form of face-to-face contact. Postgraduates were expected to require less support. Print was used in all cases, except in a fully online subject. IT academics used online support resources, while health discipline academics used a greater variety of learning resources, including teleconferencing. The phone was also used extensively for student support by most academics across both disciplines.

Staff recognised that what they viewed as the best pedagogical combinations of learning resources were not always possible, due to considerations of time or marketing pressures.
However, in most cases, the academic staff interviewed made decisions about the choice of learning resources autonomously, with some input from other members of their discipline team, but with little or none from the Head of School or the Dean. In only three instances were University costs specifically mentioned in the decision making process. In one case, the Dean had decided not to allow a residential school to be offered for a subject that had a small enrolment and required the use of laboratory staff and equipment. In another, the cost of creating and maintaining a video was cited as a reason for not using video resources, and in the third case, some restriction on phone usage to students was mentioned. However, staff seemed much more conscious of the costs to the students, both monetary and personal, of requiring them to come to a residential school, or to have access to computing resources.

Residential schools

Negotiation of alternatives to compulsory residential schools was the exception rather than the rule and students who required an exemption were not always fully informed in their decision making. Most staff made an effort to provide students who gained an exemption through misadventure with essential information they had missed, but this was not always the case. If a student is unable to get to a residential school, then it would be in that student's best interest if more information was given in the subject outline about the school's program and, after the school, all essential information that had been discussed was provided.

Optional schools were in some cases taught the same way as compulsory schools, rather than being remedial in nature, which meant that such things as hints about assessment would only be available to students who attended. This creates an inequitable situation that needs to be addressed, either by making optional schools truly remedial or providing the same information to all students whether they attend or not. The academic staff who did not offer residential schools seemed to be more conscious of the need to consider a variety of alternative support mechanisms that resulted in a more equitable situation.

References

CSU 1994, *Residential school policy*, endorsed by the Academic Senate 26th October, Charles Sturt University.
URL http://www.csu.edu.au/acadam/plm.htm

Appendix A

On-campus residential schools and alternatives
Interview questions

Personal Background

1 How long have you been employed at CSU or its prior institutions?

2 What course(s) do you usually teach?

3 What distance education subjects you usually teach - subject code and name? Do you teach these internally as well?

4 Have you ever studied by distance education yourself? If so, as a student, what were your experiences and attitudes to the residential requirements (if any)?

5 As a lecturer, what issues do you see as important in relation to residential requirements? Have your attitudes changed over the past five years?

University policy and practice

A copy of the official University policy on residential schools, passed by the Academic Senate, and the regulations on exemptions was enclosed with these interview questions.

1 Did you know the residential school policy existed and where the documentation could be found?

2 How do you usually implement the policy on 'compulsory' and 'optional' residential schools?

3 How do you usually implement the regulations on exemptions?

4 Who usually makes the decision on implementation - you/a discipline team/Head of School/Dean/School Board?

Learning resources

1 What mix of learning resources do you usually use in your subjects print/video/audio/computer disks/teleconferencing/online support/compulsory residential schools/optional residential schools?

2 Who usually makes the decision on which resources you use - you/a discipline team/Head of School/Dean/School Board/Professional Association?

3 On what grounds is the decision based - pedagogical/financial/time/historical/student support/equity/competitive?

4 Have these combinations of resources changed recently or will they in the near future? If so, what reasons are there behind the changes?

Subjects with compulsory residential schools

1 Have you explored alternatives to these compulsory residential schools? If so, what alternatives did you consider and why? If not, what is it in your discipline that makes residential schools essential?

2 Have you ever negotiated alternatives with students who require an exemption through misadventure?

3 Do you detail in these subject outlines the outcomes for students at residential schools, in order to better inform students who require an exemption?

4 Do you provide students, who have obtained an exemption through misadventure, with copies of essential information distributed at the residential school?

5 Have you had any feedback from students about their attitudes to compulsory residential schools and the exemption regulations?

Subjects with optional residential schools

1 Did these subjects have a compulsory residential school in the past? If so, what reasons have there been for the change?

2 What sort of learning opportunities are provided at these residential schools?

3 Do you detail in these subject outlines the outcomes that should be achieved by students at residential schools, in order to better inform students who must choose whether to attend?

4 Have you had any feedback from students about their attitudes to optional residential schools?

Subjects with no residential school

1 How are two-way interactive opportunities provided for students in these subjects?

2 How do students attain practical skills (if any) in these subjects?

3 Have students ever asked to have a residential school provision?

Library use as a generic skill

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Abstract

The School of Environmental and Information Sciences has identified a series of generic skills graduates should possess upon entering the workplace. These skills are not taught separately but embedded into different subjects. We will review the effectiveness of such skill transfer based on experiences gained in Spring 1996 from the perspective of lecturers and library staff.

Why teach generic skills?

Students entering the work force are required to possess a wide range of skills above and beyond the professional proficiency in their chosen field of study. Among these skills are communications, presentation, conflict resolution and the like. Likewise, graduates are expected to be computer literate, capable of independent research and so forth. The School of Environmental and Information Sciences (SEIS) has drawn up a list of such skills which was derived from meetings with its industry curriculum advisory committee, identifying skills industry wishes to see, and based on discussions among staff, identifying skills students need to have to complete their studies.

Rather than compressing these skills into a specific subject such as 'communications', SEIS took the approach of embedding the skills into a series of core subjects, where one subject would teach the skills, while others would reinforce and/or assess them. This decision was made for two reasons:

(i) the compartmentalisation of student learning might create a situation where the skills were 'learned', yet in reality not acquired and hence not applied in higher level subjects or later in life; and

(ii) staff and industry curriculum advisory committee revisiting the course structure did not favour the dropping of one of the content subjects for a skills subject.

Library skills - A case example

The generic skills of library usage and the utilisation of library resources for research serve as a case study to assess how well the generic skills embedding technique used by the SEIS is working.

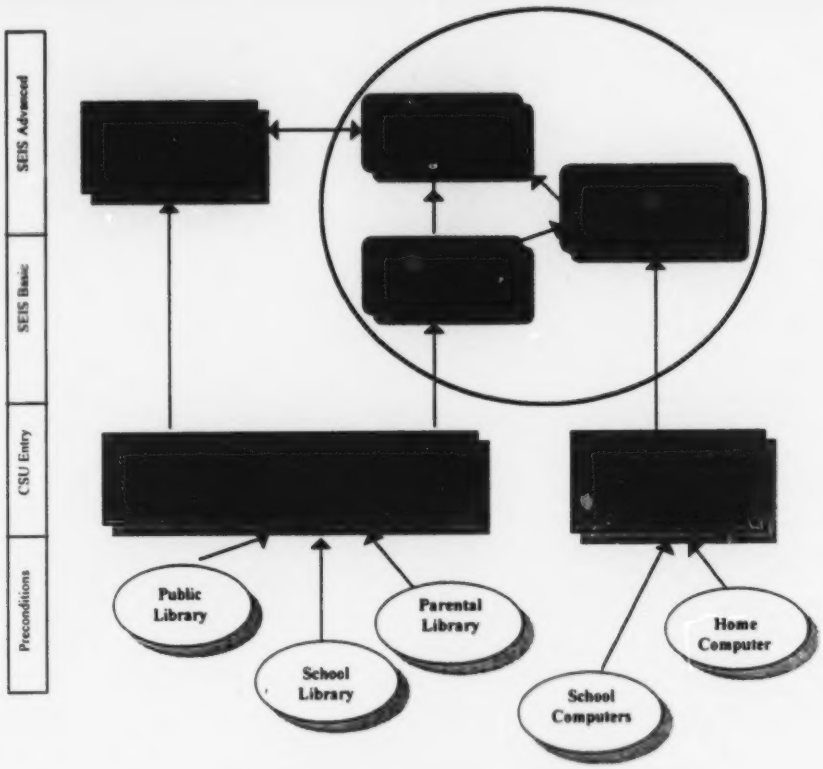

Figure 1: The library generic skills cluster

The objectives of teaching library skills

Reader education: The Library's goal in conducting a Reader Education (RE) program is to assist staff and students in identifying and locating resources they require for teaching and study. RE classes are used to instruct students in the selection and use of tools such as the catalogue to identify books, computerised databases to identify periodical articles and other electronic resources available via the internet.

Library skills: The library assignment set for first year students (term 1) in the subject of Recreation Leadership (REC167) was developed as part of the Generic Skills program within the School. It was to serve as an experiential learning approach of introducing the library resources such as catalogues, databases and the World Wide Web (WWW), and the methodology of referencing.

Teaching quality control: The follow up of these basic skills occurs in the subject Cultural Resource Management (PKM266). The 1996 student population for the subject was mixed, comprised of about 30% BAppSci (Ecotourism) students which take the subject in term 2 of their second year, and 70% BAppSci (Parks, Recreation and Heritage) students who take the subject in term 2 of their first year. The teaching of library skills in PKM266 focussed on the need for quality control, aimed at empowering students to:

(i) distinguish between unrefereed text and material that has undergone a rigorous peer review process;

(ii) appreciate that there is valid place in academia for unrefereed material;

(iii) understand that conference proceedings and edited books need not be refereed; and

(iv) realise that books too are of varied quality and that peer opinions on the validity of a book can be obtained via book reviews.

The mechanics of teaching library skills

Reader education: The reader education program is typically based on orientation tours for new students which are followed up by formal classes for new students. These classes cover issues such as description of resources and facilities available from the CSU Libraries, library loan policies and fines, inter-campus and inter-library loans, basic searching the library catalogue, together with an introduction to other electronic resources (i.e. CD-ROM, on-line databases, WWW). For further more specialised advice, the library offers voluntary sessions as requested by students or by academic staff. These voluntary sessions typically have a very flexible format and content.

The formal classes conducted for new students are organised with individual Schools or lecturers and conducted by library staff demonstrating the use of the particular tool. More complex resource such as computerised databases are introduced in general terms with detailed instruction requiring 'hands on' sessions for smaller groups. RE classes tend to have a greater impact when the skills taught have an immediate application.

Library skills: A one page assignment based on the area of Recreation Leadership is written in consultation with library staff. The assignment is handed out in the first lecture of the semester and consists of blanks which the students have to fill in. Tutorials are ran by the library staff based on the requirements of the assignment. Students are required to resubmit if they do not successfully complete ALL of the assignment requirements.

Training for the generic library skills assignments was carried out in the computer labs by two library staff with groups of up to twenty students. They were taken through searches step by step, using the catalogue and other databases as required for their particular assignment.

The assignment complemented and reinforced the existing RE program with long term benefits for the students in more than just the immediate subjects associated with the generic skills training.

Teaching quality control: In the week prior to the tutorial students had undergone a two hour lecture and a two hour practical tutorial on the use of the WWW and the search engines. A one-hour tutorial was given to teach the quality control skills; to show students various kinds of printed media (in the field of cultural heritage); and to demonstrate how it is possible to assess the validity and reliability of the assertions made in the various types of publications. This was followed up by further exemplification to those who remained unsure.

Students were given an assignment task for which they had to attempt to locate between five and ten monographs, refereed articles and World Wide Web sources each on a given topic, and to provide a brief summation of its content, akin to an annotated bibliography. This assignment was then to be submitted by email to the lecturer.

Problems encountered

The generic skills assignments placed a heavy demand on library staff time. Staff were required to conduct classes, and there was a heavy demand on reference staff during the course of the assignment. Both generic skills assignments would have benefited from more consultation and input from library staff.

Both generic skills assignments were taught in the same term of the year, thus not allowing students to firm up their skills in one term and then to expand on these skills in the extent term.

Major problems encountered in the *library skills assignment* were that the assignment attempted to cover too much in the time available and that over the time period for submission the available physical and staff resources were over extended. This was compounded by the fact that a significant number of the students had limited experience with the use of computers in the labs. Overall, the process is time consuming in terms of writing, marking and feedback.

Major problems encountered in the *quality control assignment* were that it was assumed that skills existed and thus there was no skills training component for some of the resources (CD-ROM) required to be used by the students. Each student's topic was different to prevent collusion. In some marginal topics the results of the searches were meagre. Even though this mirrored a real life scenario and would normally be an acceptable result, it did not give the affected students any reward or confidence in their searching skills. Even though students were told that they would be marked on process, format and write-up, and not on the extent of the 'harvest', several students experienced traumatic stress.

A question of time

It is clear that the generic skills approach as taken is fraught with problems, one of the key limiting factors being time:

- time that can be dedicated to the library skills tutorials (i.e. at least one week of only thirteen weeks of teaching);
- time that can be dedicated to mark students' assignments that are generic and not germane to the subject taught; and
- time library staff have to dedicate to teach a tutorial and to follow up queries of one hundred students or more.

A way out of the dilemma

A more coordinated approach between the subject requirements, the lecturers and the library staff is required. In future (1997) it is intended that generic library assignments will:

(i) be sequenced over two consecutive terms;

(ii) complement each other in the library skills required;

(iii) build on WWW skills embedded into a separate subject;

(iv) reflect the time available for skills training in terms of content;

(v) prevent overloading the students so they become more proficient in all areas over a period of time; and

(vi) set research subjects/topics for which all students can be expected to readily obtain results.

Was it worth it?

The answer has to be a cautious YES because in the long term the students are introduced to ways of finding resources through various search methods which they will require throughout their study period and beyond; they will learn the required methodology of referencing for all subjects run through SEIS; and they will be empowered to make a first principles critical assessment of the validity ranking of printed/on-line publications.

At a time of increasing competition in the tertiary education sector, students can expect this level of skill transfer, even if it taxes the University resources in terms of technology access and staff time.

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